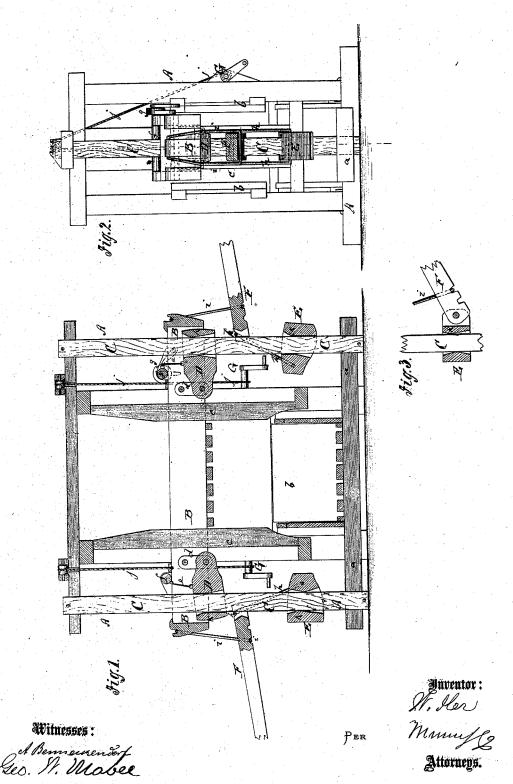
M. Iler,

Cation Press.

No. 107.688

Patented Sep. 27. 1870.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

WILLIAM ILER, OF SHREVEPORT, LOUISIANA.

Letters Patent No. 107,688, dated September 27, 1870.

IMPROVEMENT IN BALING-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, WILLIAM ILER, of Shreveport, in the parish of Caddo and State of Louisiana, have invented a new and improved Baling-Press; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference beinghad to the accompanying drawing forming part of this specification, in which-

Figure 1 represents a vertical longitudinal section

of my improved baling-press.

Figure 2 is an end elevation of the same.

Figure 3 is a detail side view, partly in section, of a modified form of clutch and lever.

Similar letters of reference indicate corresponding

This invention relates to a novel construction of mechanism for working the follower of a baling-press, and consists in a new arrangement of friction-clutches for working the follower downwardly, and also in a new construction of clutch, as hereinafter more fully described.

A in the drawing represents the frame of the press. It consists of the fixed bottom a, hinged or removable

sides b, and fixed ends c c.

The follower B projects beyond the ends of the press, through vertical slots of the same, and embraces, at its ends, vertical posts O C, as shown.

D D are friction-clutches, pivoted to links d d, that

are pivoted to the ends of the follower.

These clutches D embrace the square posts C C, and serve to retain the follower in the position to which it has been lowered.

Each clutch D is, by a cord, e, connected with a small windlass, f, which is hung in the follower, and which can be locked by pawl and ratchet-wheel g. This windlass serves to hold the clutch suspended horizontally when it is desired to elevate the follower.

E is another clutch, fitted loose around the post C, below the follower.

F is a lever for moving the follower up or down. A link, h, connects the lever F with the clutch E, and another link, i, connects the lever \mathbb{F} with the follower, as shown in fig. 1.

By swinging the lever on its links, the follower will be drawn down at one stroke, and the clutch E let down at the next.

The clutch D locks the follower and makes the upper link i the fulcrum of the lever, while the lower clutch is moved down.

The other link k furnishes the fulcrum while the follower is being drawn down. It is evident that a lever, F, and clutch E are used at each end of the

G is a windlass, which, by means of ropes j, serves to elevate the follower when the press is to be set for

The lever F may, if desired, be pivoted directly to the clutch E, as in fig. 3, in which case the link h is

It will be noticed that on the outer or operating side, the throat of each clutch is so formed that the biting or clamping corner k is higher than that on the opposite side; thereby greater power is obtained, and the liability of slipping in a strain is prevented.

Having thus described my invention,

I claim as new and desire to secure by Letters Pat-

1. The clutches D D, constructed as described, combined with $\operatorname{cord} a$, windlass f, and pawl and ratchet g, to form a locking device for the follower, as set

2. The locking devices D efg and fulcrum clutches E E, links h i, and levers F, combined with the projecting follower B, as and for the purpose described. 3. A clutch for presses, having the biting point k

higher on the outer than the inner side, as and for the purpose described.

WILLIAM ILER.

Witnesses:

JAMES W. ARNOLD, N. C. HALL.